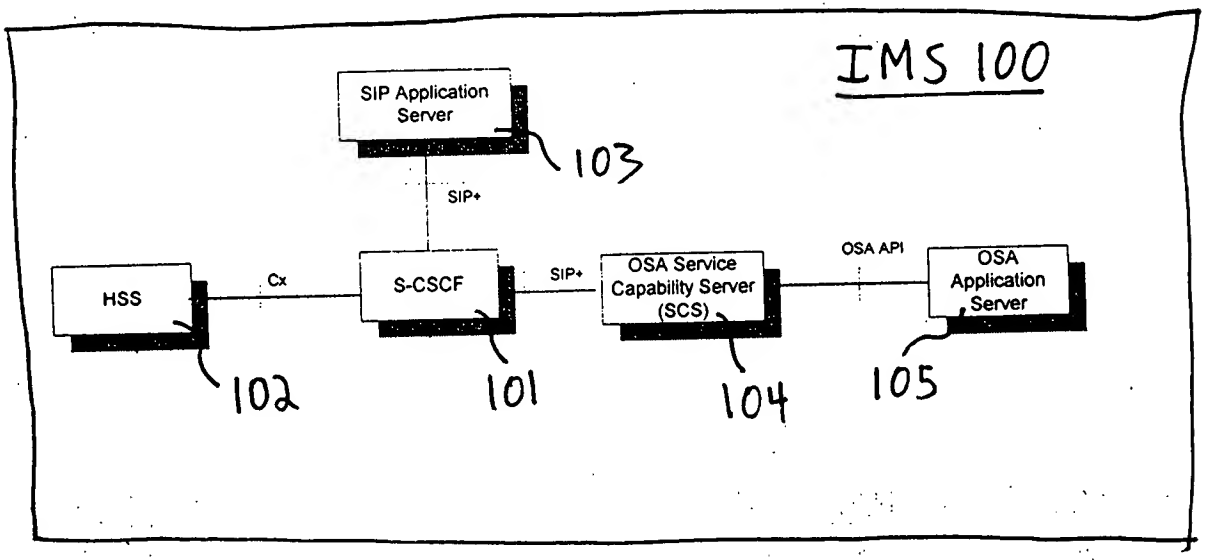
IMS 100
SIP Application Server
103
SIP+
HSS
Cx
S-CSCF
SIP+
OSA Service Capability Server (SCS)
OSA API
OSA Application Server
102
101
104
105

Fig. 1

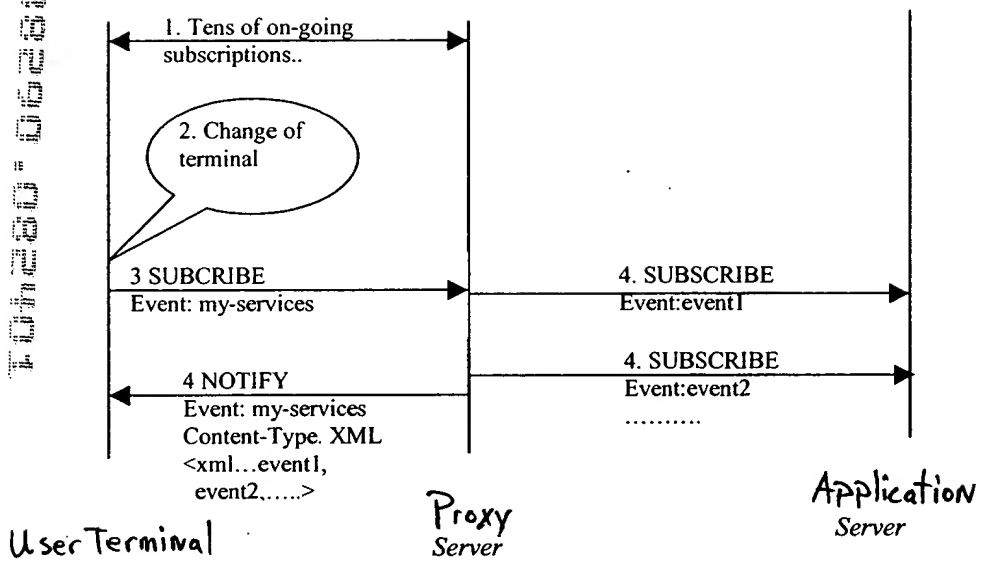
1. Tens of on-going subscriptions..
2. Change of terminal
3 SUBCRIBE
Event: my-services
4. SUBSCRIBE
Event:event1
4. SUBSCRIBE
Event:event2
.....
4 NOTIFY
Event: my-services
Content-Type. XML
<xml...event1,
event2,.....>
User Terminal
Proxy Server
Application Server

Fig. 2

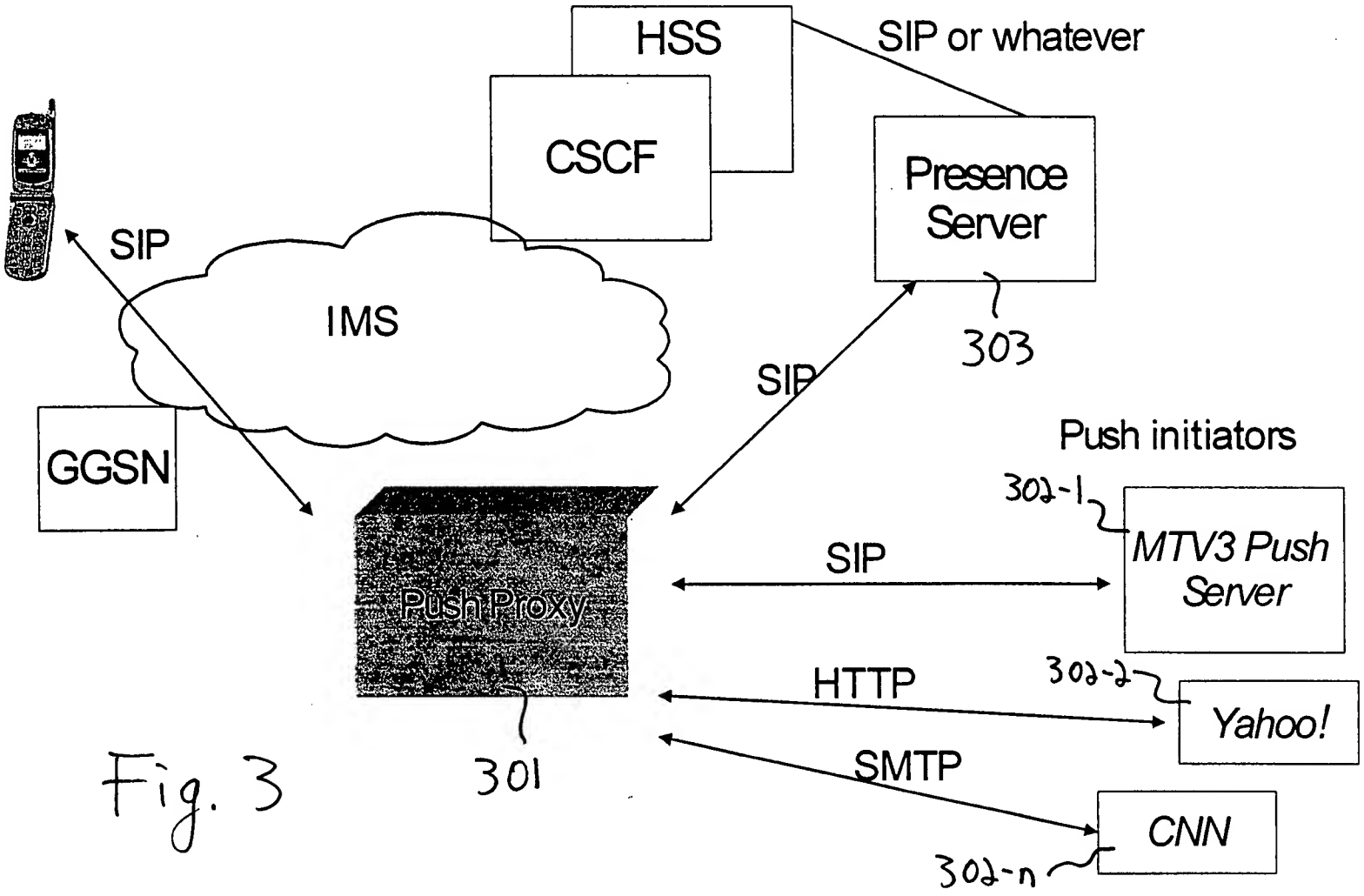
HSS
SIP or whatever
CSCF
Presence Server
SIP
IMS
303
SIP
GGSN
Push initiators
302-1
MTV3 Push Server
SIP
Push Proxy
HTTP
302-2
Yahoo!
SMTP
CNN
301
302-n

Fig. 3

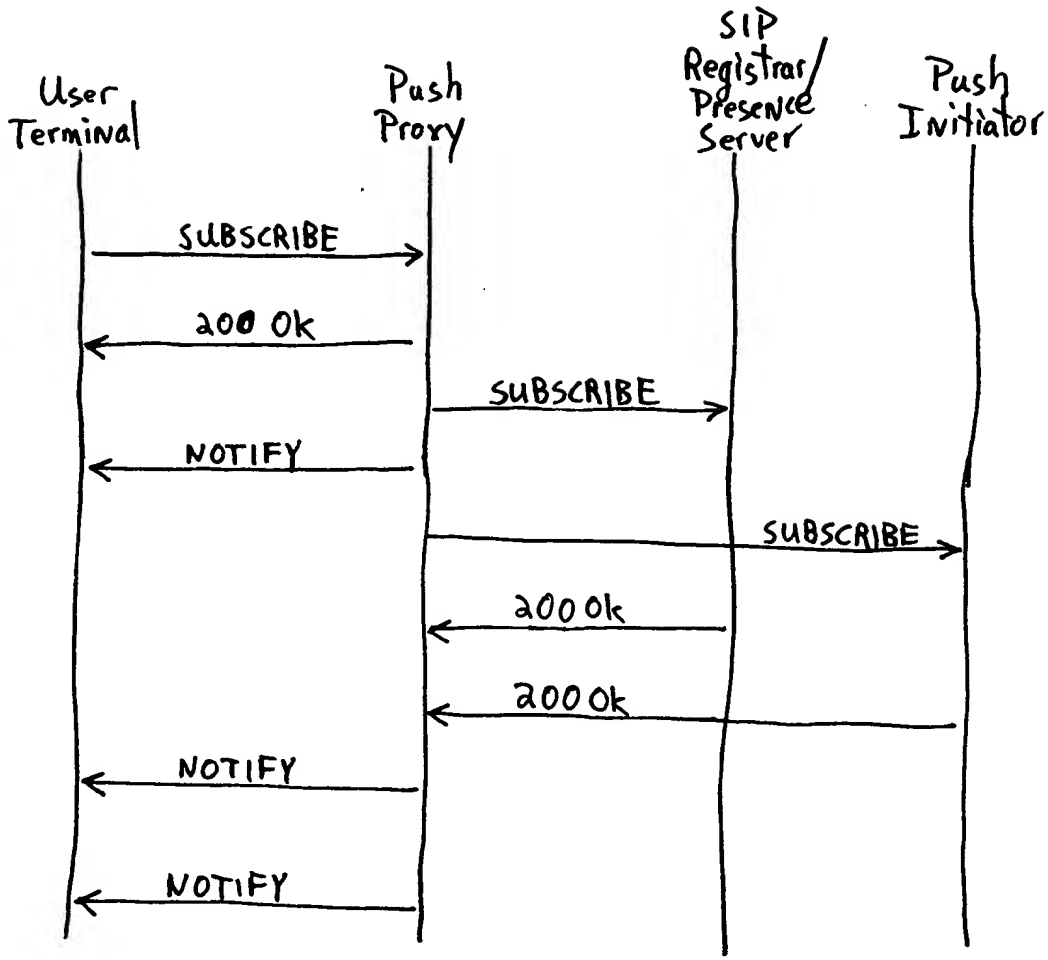
User Terminal
Push Proxy
SIP Registrar/ Presence Server
Push Initiator
SUBSCRIBE
200 Ok
SUBSCRIBE
NOTIFY
SUBSCRIBE
200 Ok
200 Ok
NOTIFY
NOTIFY

Fig. 4

SIP SUBSCRIBE
Event: Push
From: sip:pk@mci.com
Content: XML
<XML allow_ads=no>

202 Accepted / 200 ok

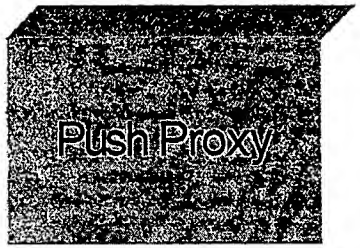

Fig. 5

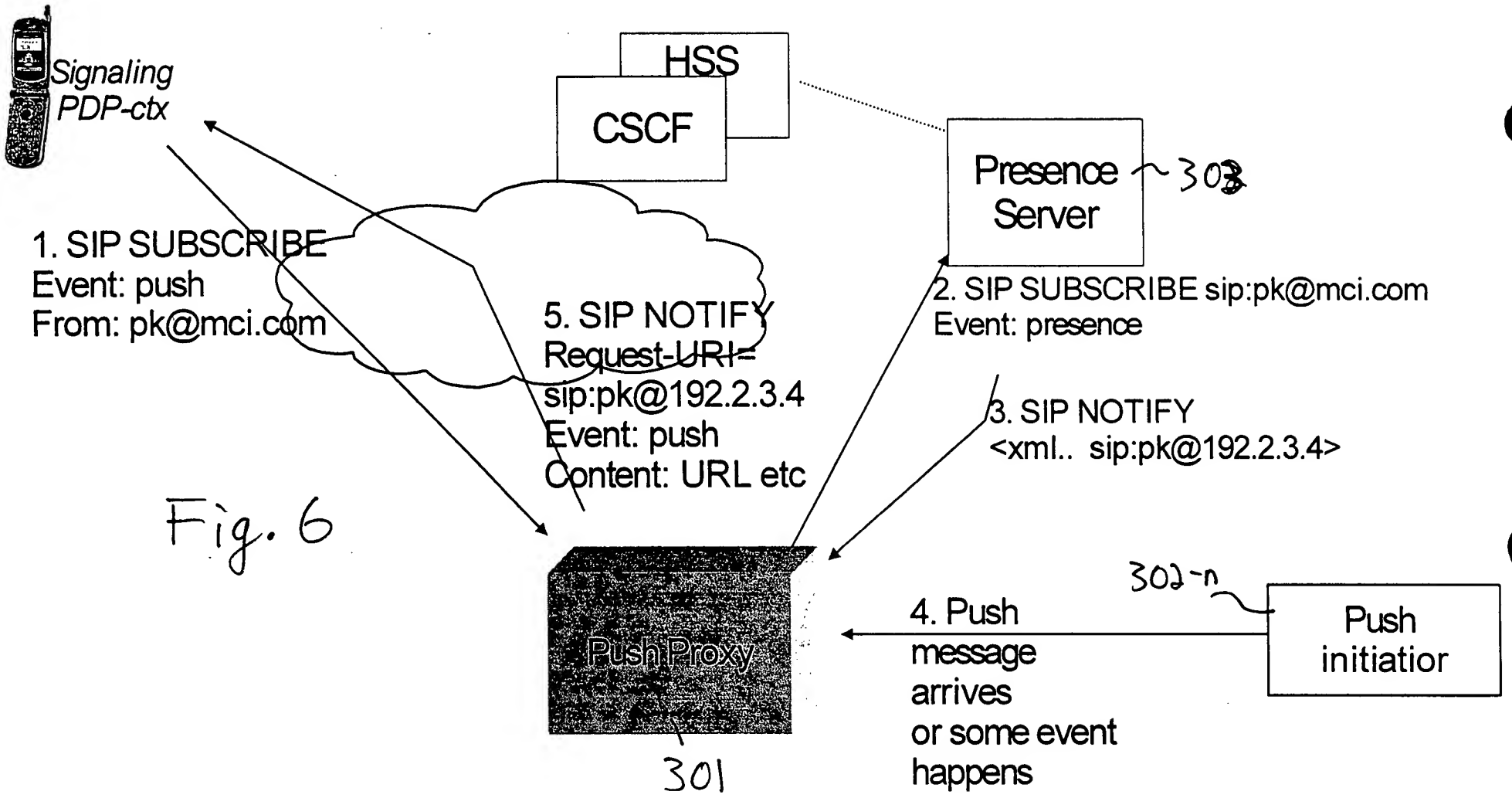
Signaling
PDP-ctx
HSS
CSCF
Presence
Server
303
1. SIP SUBSCRIBE
Event: push
From: pk@mci.com
5. SIP NOTIFY
Request-URI=
sip:pk@192.2.3.4
Event: push
Content: URL etc
2. SIP SUBSCRIBE sip:pk@mci.com
Event: presence
3. SIP NOTIFY
<xml.. sip:pk@192.2.3.4>
Push Proxy
301
302-n
Push
initiatior
4. Push
message
arrives
or some event
happens

Fig. 6

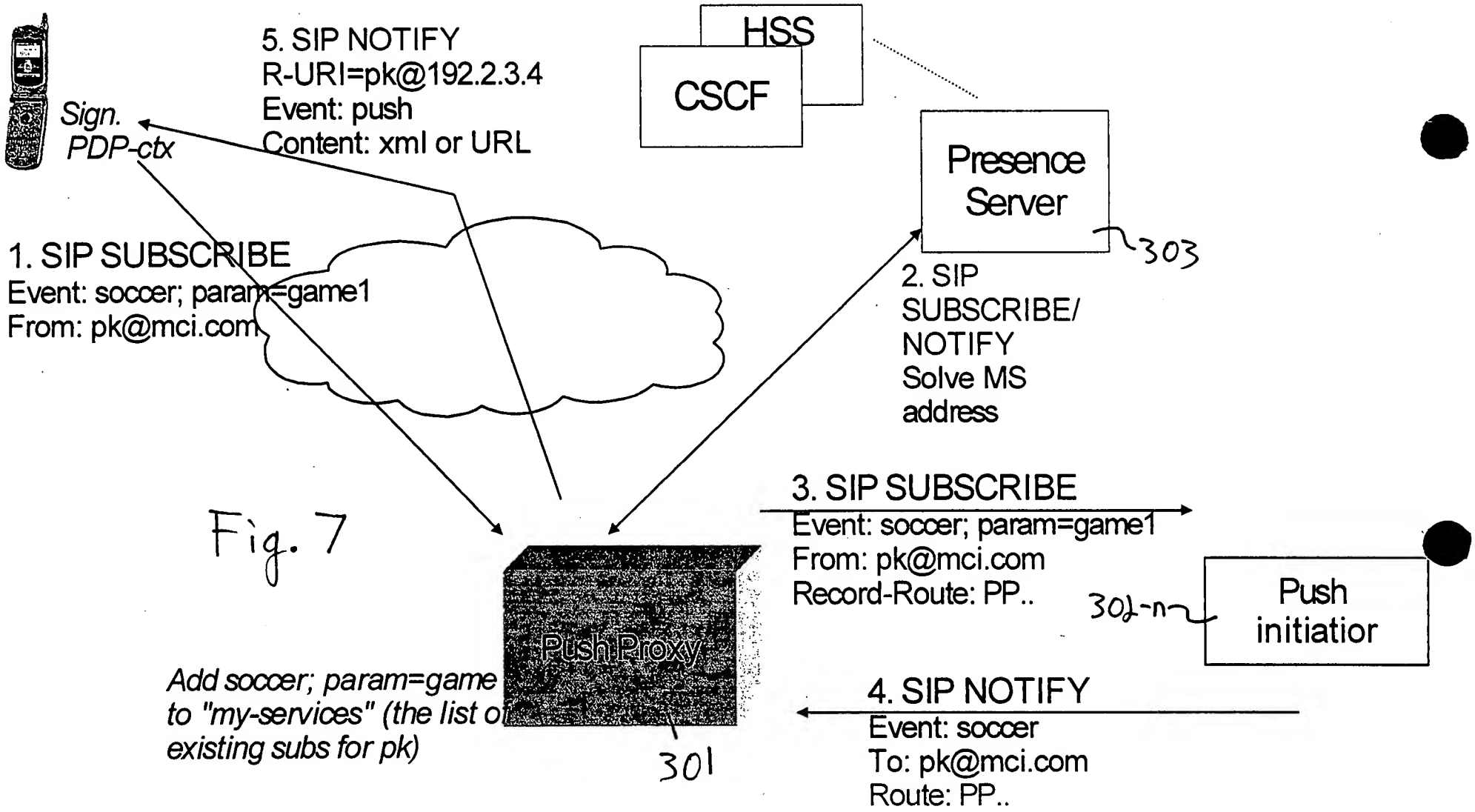
HSS
CSCF
Presence Server
303
5. SIP NOTIFY
R-URI=pk@192.2.3.4
Event: push
Content: xml or URL
Sign.
PDP-ctx
1. SIP SUBSCRIBE
Event: soccer; param=game1
From: pk@mci.com
2. SIP SUBSCRIBE/ NOTIFY
Solve MS address
3. SIP SUBSCRIBE
Event: soccer; param=game1
From: pk@mci.com
Record-Route: PP..
302-n
Push initiatior
Push Proxy
301
Add soccer; param=game
to "my-services" (the list of
existing subs for pk)
4. SIP NOTIFY
Event: soccer
To: pk@mci.com
Route: PP..

Fig. 7

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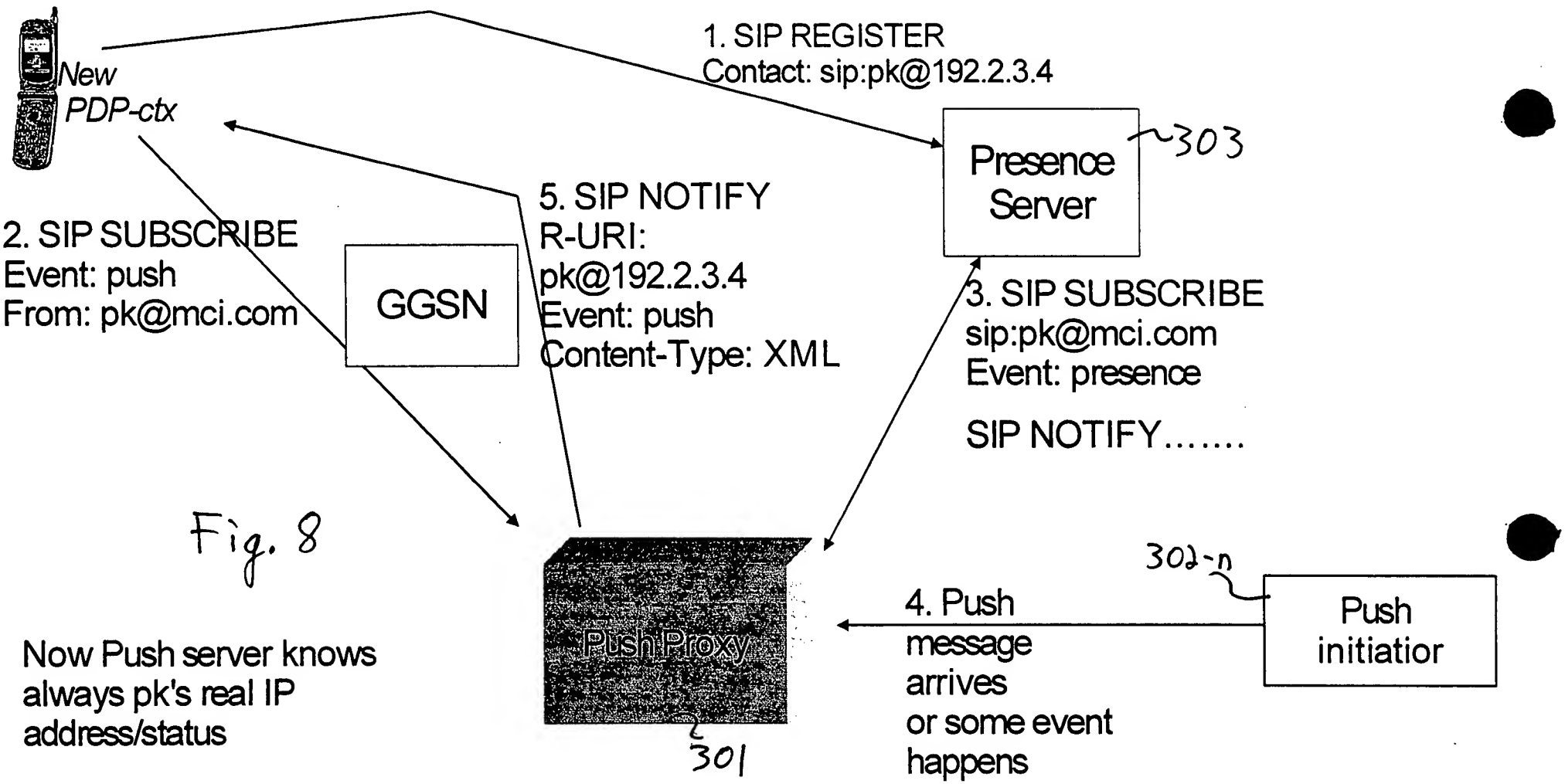

Fig. 8

Now Push server knows always pk's real IP address/status

SIP or HTTP
to manage
subscriptions after
they have been
created by MT
user..

301

Push Proxy

Fig. 9

Subscription/push database:

User: sip:john@mci.com = sip:john@192.99.99.77
Events:
soccerupdate; param=game292 R-URI=sip:soccer.com

User: sip:petri@mci.com = sip:pk@192.22.33.44; transport=UDP

Events:	Push initiator:
soccerupdate; param=chelseagame19	R-URI=sip:soccer.com
soccerupdate; param=manugame25	R-URI=sip:manu.co.uk
chess	R-URI=sip:robot@chess.fi
com.nokia.clubnokia; param=foo2	R-URI=sip:club.nokia.com
push1 ALLOW_ALL	R-URI=localhost:50